To: Dinkins, Carol[cdinkins@velaw.com]
Cc: Hick, Patricia[Hick.Patricia@epa.gov]

From: Flanagan, Sarah

**Sent:** Wed 3/26/2014 10:05:07 PM **Subject:** FW: FFS models transfer to Tierra

Carol,

This is to let you know that EPA's contractor Hydroqual shipped to Cliff Firstenberg of Tierra Solutions, Inc. two hard drives containing the information discussed below, and they were reportedly received by Cliff on March 25, 2014. The first drive (4TB drive, Blue) has the hydrodynamic and sediment transport code, inputs and outputs on it, the second drive (2TB drive, Western Digital) has the carbon and fate and transport model codes, inputs and outputs on it.

The next EPA meeting with the CPG modeling team will occur on April 10, 2014, at Hydroqual's offices in Mahwah, NJ, the subject of which is contaminant fate and transport. Occidental is welcome to sent a technical representative. We recognize that Occidental is typically represented by Tierra at technical meetings, but given Frank Parigi's recent participation in Diamond Alkali Site related matters, we would like to let Glenn Springs know that it is welcome to send a technical representative.

Please let me know if you have any questions

Regards,

-Sarah

Sarah P. Flanagan Office of Regional Counsel, NJ Superfund Branch USEPA, Region 2 290 Broadway, 17th Floor New York, NY 10007

Tel: 212-637-3136

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From: Wands, James < <u>James.Wands@hdrinc.com</u>>

**Sent:** Tuesday, March 25, 2014 9:44 AM **To:** Clifford Firstenberg; Naranjo, Eugenia

Cc: Garland, Edward

Subject: RE: FFS models transfer to Tierra

Cliff,

How have you been?

Your hard drives are on the way and should arrive today via UPS (http://wwwapps.ups.com/WebTracking/track?HTMLVersion=5.0&loc=en\_US&Requester=UP SHome&WBPM\_lid=homepage%2Fct1.html\_pnl\_trk&trackNums=1Z09YY411393334174%0D %0A%0D%0A&track.x=Track ).

The first drive (4TB drive, Blue) has the hydrodynamic and sediment transport code, inputs and outputs on it, the second drive (2TB drive, Western Digital) has the carbon and fate and transport model codes, inputs and outputs on it.

Please note that the models were run across an array of servers so paths in the run scripts point to various locations and will have to be edited in order to run the scripts. Some of the scripts have been edited so that they point to the relative path to the appropriate files on the transfer drives.

If you have any questions let us know.

The contents of the disks are listed here:

- · Hydrodynamics & Sediment Transport (4TB Drive, the blue one)
- o TRANSFER\_TO\_TIERRA

## § SEDTRAN

- $\cdot$  CODE = CODE
- · INPUTS = INPUTS
- · Eight runs, script used for runs = xqtrun, located in each directory
- o RUN229 SHALLOW (1996-2012)
- o RUN229\_DEEP (1996-2010 forcing cycled for 2013-2027, 2028-2042, 2043-2057, 2058-2059)
- o RUN233\_DREM\_DRE (Deep Dredging, active remedy, 2001-2010, 1996-1997 forcing, run for 2018-2029)
- o RUN229\_POST\_DRE\_CORR (Deep Dredging, post remedy, 1998-2010, 1996-1997 forcing, cycled for 2030-2044, 2045-2059)
- o RUN233\_DREM\_CAP (Capping with Dredging, active remedy, 2001-2010, 1996-1997 forcing, run for 2018-2029)
- o RUN229\_POST\_CAP\_CORR (Capping with Dredging, post remedy, 1998-2010, 1996-1997 forcing, cycled for 2030-2044, 2045-2059)
- o RUN233\_DREM\_FOC (Focused Capping with Dredging, active remedy, 2001-2010, 1996-1997 forcing, run for 2018-2029)
- o RUN229\_POST\_FOC\_CAP\_CORR (Focused Capping with Dredging, post remedy, 1998-2010, 1996-1997 forcing, cycled for 2030-2044, 2045-2059)

## § ECOM-COLL-PRR

- · Collapsed hydrodynamic and sediment transport files
- o Script rw yrly gemsedtran.sh generates collapsed files

- o One directory for each of the eight runs above. The directory name is the same with "\_COLL" appended to the end.
- · Carbon & RCATOX (2TB Drive)
- o TRANSFER TO TIERRA
- § ST-SWEM-PASS-COLL-PRR
- · CODE20130820 = CODE
- · INPUTS = Carbon inputs
- · RUN-PROJECTION-MNR-PRR (Alternative 1, No-Action, 1996-2059, script = run-lpr-mnr-prr)
- · RUN-PROJECTION-DRG-PRR (Alternative 2, Deep Dredging, 2018-2059, script = run-lpr-drg-prr)
- · RUN-PROJECTION-CAP-PRR (Alternative 3, Capping with Dredging, 2018-2059, script = run-lpr-cap-prr)
- · RUN-PROJECTION-FOC-PRR (Alternative 4, Focused Capping with Dredging, 2018-2059, script = run-lpr-foc-prr)
- § RCATOX-PASS-COLL-PRR
- · CODE20130820-STACK = CODE
- · One directory for each of the nine contaminant groups simulated
- o DIOXIN1 (2378-TCDD, 123478-HxCDD, 123678-HxCDD, 123789-HxCDD, 1234678-HpCDD, OCDD)
- § INPUTS = DIOXIN1 inputs
- § RUN-PROJECTION-MNRGRRCH-PRR (Alternative 1, No-Action, 1996-2059, script = run-lpr-mnrgrh-prr)
- § RUN-PROJECTION-DRGGRRCH-PRR (Alternative 2, Deep Dredging, 2018-2059, script = run-lpr-drggrh-prr)
- § RUN-PROJECTION-CAPGRRCH-PRR (Alternative 3, Capping with Dredging, 2018-2059, script = run-lpr-capgrh-prr)
- § RUN-PROJECTION-FOCGRRCH-PRR (Alternative 4, Focused Capping with Dredging,

```
2018-2059, script = run-lpr-focgrh-prr)
o DIOXIN2 (12378-PeCDD, 12378-PeCDF, 123789-HxCDF, 234678-HxCDF, 1234789-
HpCDF)
§ Same structure as DIOXIN1
o DIOXIN3 (2378-TCDF, 23478-PeCDF, 123478-HxCDF, 123678-HxCDF, 1234678-HpCDF,
OCDF)
§ Same structure as DIOXIN1
o PCB (Di-PCB, Tri-PCB, Tetra-PCB, Penta-PCB, Hexa-PCB)
§ Same structure as DIOXIN1
o PCB2 (Mono-PCB, Hepta-PCB, Octa-PCB, Nona-PCB, Deca-PCB)
§ Same structure as DIOXIN1
o PCB-TEF1 (BZ#77, BZ#81, BZ#105, BZ#114, BZ#118, BZ#123)
§ Same structure as DIOXIN1
o PCB-TEF2 (BZ#126, BZ#156, BZ#157, BZ#167, BZ#169, BZ#189)
§ Same structure as DIOXIN1
o PEST1 (2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT)
§ Same structure as DIOXIN1
o METALS (Cadmium, Mercury, Methylmercury)
§ Same structure as DIOXIN1
Regards,
James
```

James Wands, PE

**HDR** 

Senior Water Quality Modeler

Professional Associate 1200 MacArthur Blvd | Mahwah, NJ 07430 201.529.5151 | f: 201.529.5728 james.wands@hdrinc.com | hdrinc.com

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----Original Message----

From: Clifford Firstenberg [mailto:Clifford.Firstenberg@tierra-inc.com]

Sent: Monday, March 24, 2014 8:06 AM

To: Naranjo, Eugenia Cc: Wands, James

Subject: RE: FFS models transfer to Tierra

Please ship to me at the following address - and, please do not require a signature. If I'm out of the office or on a call and can't get to the door, FEDEX/UPS will not leave the package. But please let me know when to expect the delivery (or use the email tracking feature). THANKS!

16 Ensigne Spence

Williamsburg, VA 23185

757-258-7720

Clifford E. Firstenberg

Environmental Sciences Manager

Tierra Solutions, Inc.

E-mail: <u>Clifford.Firstenberg@tierra-inc.com</u>

Phone: 757-258-7720

FAX: 757-258-7720 (during business hours, call first)

Cell: 757-206-6281

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Thank You.

----Original Message----

From: Clifford Firstenberg

Sent: Monday, March 24, 2014 6:40 AM

To: 'Naranjo, Eugenia'

Cc: James Wands

Subject: RE: FFS models transfer to Tierra

I'll let you know later today.

Thx

Cliff

Clifford E. Firstenberg

Environmental Sciences Manager

Tierra Solutions, Inc.

E-mail: <u>Clifford.Firstenberg@tierra-inc.com</u>

Phone: 757-258-7720

FAX: 757-258-7720 (during business hours, call first)

Cell: 757-206-6281

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Thank You.

----Original Message---From: Naranjo, Eugenia [mailto:Naranjo.Eugenia@epa.gov]

Sent: Sunday, March 23, 2014 8:30 PM

To: Clifford Firstenberg

Cc: James Wands

Subject: FFS models transfer to Tierra

Hi Cliff,

HydroQual is ready to ship the hard drives with the FFS models to Tierra -tomorrow Monday. Can you let James know the exact address of where he should be shipping the stuff?

Thanks,

eugenia